



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

the close; Carlton, *The Small Grains* (Macmillan); De Candolle, *Origin of Cultivated Plants* (a volume of the International Science Series). c. κ.

ROGER BACON'S VISION OF THE STUDY OF GREEK

A breadth of vision beyond the average of his age characterizes Roger Bacon. This is no less obvious in his conception of language-study than in the fields of philosophy and natural science. As he foresaw the invention of the microscope, the telescope, the camera obscura, and gunpowder, so he foresaw the revival of the study of Greek and correctly estimated its value. In place of the sterile language-study of his own day (the *Ars Grammatica*) he substituted a new ideal, broad as the horizon of human imagination. The *Ars Grammatica* had consisted largely of memorizing the rules and exceptions of Latin grammar, venerated for their disciplinary value. Upon these precepts the subtler wits had exercised themselves in absurd metaphysical speculations, as, for instance, upon the mystic meaning of vowels and consonants. Bacon refused to wander in this arid labyrinth. The purpose of grammar he defined as the mastery of the languages in which the wisdom of the ancients had been recorded for posterity. More than this, he foresaw, what only modern scholarship has brought to pass, that the surest way to understand one language is to study many languages. His famous dictum that "grammar is substantially the same in all languages, the variations accidental" eventually became the foundation of 'universal grammar', i. e. the science of comparative philology.

In method Bacon was a true scholar and a true humanist: a true scholar, because—to put it simply—he was honest; a true humanist, because he trusted his own powers, even to the correction of the most revered authorities, wherever and whenever they failed to measure up to the standard of human criticism.

In some respects this dawn of humanism in the thirteenth century was far broader in its aims than the triumphant humanism of the fifteenth century. Bacon, Grosseteste, and the few choice spirits of the thirteenth century were ready to welcome any new light upon the great problems of philosophy, theology, and science, whether that light came from Latin, Greek, Arabic, or Hebrew sources. The disciples of Petrarch, on the other hand, accepted only that which came from pagan Greece and Rome, edifying or unedifying. The Petrarchians soon made a fetish of what Bacon more wisely regarded as a means to an end. Bacon's efforts came to naught; Petrarch's succeeded; the modern world has realized Bacon's aims with Petrarch's materials.

The practical application of the faulty grammatical lore of the thirteenth century was twofold: first, the time-honored task of elucidating or glossing the Old and the New Testament; second, the entirely new and epoch-making task of interpreting the works of Aristotle

either directly from the original Greek or through the Arabic versions. Up to the thirteenth century the scant knowledge of Aristotle had come through echoes and translations in classical Latin literature, especially Boethius. The closer contact with Arabic civilization in the twelfth and thirteenth centuries riveted the attention of Europe upon Aristotelian philosophy anew. Hasty translations from the original Greek treatises and from the Arabic paraphrases supplied the material for the new Aristotelian study.

It was easy for Bacon to jibe at the results achieved by the aid of the so-called grammatical art in both theology and philosophy. The Greek and Hebrew etymologies of the glossators of the New and the Old Testament were mere moonshine. Not only did they not know what they were talking about, but—worse than that—they did not care. What little information about Greek might have been gleaned from Priscian and the older Latin grammarians was nullified by the corruption of the texts of these authors. For instance, mere carelessness of copying, i. e. a simple palaeographical error, led Hugutio to assert that the Greek personal pronoun was *ἀλυσός* (instead of *αὐτός*)¹. From such non-existent forms the grammarians proceeded to draw etymologies, and fanciful etymologies at that!

As for Aristotle, Bacon rightly maintained that the translators knew not the language *from* which they translated nor the language *into* which they translated, nor the subject *about* which they translated. Some allowances must be made for the exaggerations of a propagandist, but truly monstrosities were brought forth under the name of versions of Aristotle. Some translations, for instance, were the product of a curious kind of team-work: the Latin was a Schoolman's literal rendering of a Spanish version made from the Arabic by a Jew. Other so-called translations were produced from the original Greek by what may be called the word-for-word method. One by one, and in the exact order of the original, the Greek words were replaced by corresponding Latin words—*provided* always that the translator knew a Latin word to fit; if not, he spelled the Greek word in Latin letters and let it go at that. Even the Greek definite article was not omitted. It was rendered by the Latin *ille*.

Such were the faulty data upon which philosophers and theologians wrangled and speculated ad infinitum. Bacon struck home by decrying the wilful ignorance of fundamentals. The so-called scholars of his generation were building upon sand and were all but deaf to warnings.

Obviously, Greek was the master-key to the great storehouse of ancient knowledge, Hebrew and Arabic to lesser chambers. Furthermore, we must not forget that in Bacon's day the superiority of the ancients was an indisputable fact. The modern world has outstripped the Greek and the Roman in countless ways;

¹"About the year 1100, Hélinand, a monk of Froidmont, near Beauvais, writes for *γνώσις σεαυτὸν νοθισελίτος* and *nothiseiito*". So J. E. Sandys, *A History of Classical Scholarship*², I. 556-557.

the medieval thinkers were still climbing toward the Hellenic standard.

Three things were clear to Roger Bacon: the need of Greek, the contemporary ignorance of Greek, and the feasibility of acquiring Greek. The same may be said of Hebrew, but Bacon rightly put Greek first.

Bacon's program was simple: (1) Seek out the native Byzantine Greeks resident in Europe, preferably trained grammarians. The latter were very few, of course, but might be found in the Greek monasteries of Southern Italy. (2) From these and from any other available source let Greek books be sought. If this program were to be carried out, Bacon confidently prophesied that results would not be long in forthcoming. He himself (with pardonable exaggeration) guaranteed to impart the rudiments of Greek in three days, by which he probably meant the ability to copy and interpret sanely the Greek words of the Vulgate.

In his larger systematic works Bacon sets forth his principles and his program more than once. To demonstrate his position in detail he produced the pamphlet now known as his *Greek Grammar*². It is a hasty, but clear and simple paraphrase of a current Byzantine manual of Greek grammar with numerous digressions of an argumentative or propagandist character. It is not a text-book nor a complete treatise. The whole might well be entitled, *A Pamphlet to Prove the Need of the Study of Greek with a Brief Survey of the Rudiments of Greek Grammar*. Incomplete though it now is, and perhaps always was, it is an ample vindication of Bacon's position.

Bacon's immediate needs led him to turn directly to the living heirs of the ancient Greeks—the Byzantines. Byzantine scholarship, however, was not untainted with the needless complexity and fanciful speculation of Western scholasticism, a fact which only added to the difficulties of a genuinely difficult language. Above all the itacistic pronunciation of Greek by the Byzantines (see below) had led to countless errors and multiplied the difficulties of students of the ancient tongue. Here Bacon's common sense betrayed him, for he adopted the living Greek that was ready to hand, unaware of the corruption of the ancient pronunciation.

The difficulties were somewhat analogous to those of modern English spelling and spelling-reform. The current pronunciation had changed, the spelling had remained unaltered. The illiterate, however, spelled as they pronounced. Vowel-sounds once distinct, e. g. omega and omicron, *α* and *ε*, had come to be pronounced alike, and, most confusing of all, eta, iota, ypsilon, and the diphthongs *οι* and *ει* were all merged into the *ee*-sound (Latin *i*); whence the technical term itacism (from the pronunciation of eta as *ila*). This reduction of a rich and varied vowel-system to a poor and meager one was all well enough for the simplified dialect of the common people—the Romaic or modern Greek language, but, when projected back upon the

ancient Greek, it frequently destroyed the oral distinctions between the simplest words. Add to this the ignoring of accent and breathing, and the pitfalls increase. As one imperfectly acquainted with the English tongue may confuse *to*, *too*, and *two*, so one trained in the itacistic pronunciation may confuse *καὶρόν* and *κενόν*, or *ἡ, οἱ εἰ* (all pronounced *ee*). The controversy as to the facts of the pronunciation of ancient Greek was settled by Erasmus at the beginning of the sixteenth century; the controversy as to the utility of the two systems—the current modern or the theoretical ancient—still divides the world.

Bacon therefore is at much pains to explain the itacistic pronunciation of Greek and to reconcile it with the ancient Roman transliteration of Greek words as found in Priscian and Donatus and in the classical authors. Current errors in the Latin spelling of Greek words and derivatives he corrects by the score; the system which produced these errors he does not correct. He naively affirms that the ancient Greeks wisely devised a multiplicity of vowel-signs for the same sound (e. g. *η, ι, υ, οἱ, εἰ* for the one sound *ee-la*) in order to facilitate graphical, if not oral, distinctions. It is of course true that distinctions in the spelling of words of identical sound are devised (or at least selected) in all languages—to a greater or less extent, as when we restrict the spellings *blue* and *blew* in modern English to adjective and verb respectively, but such a wholesale process as Bacon hastily postulated for Greek is, in the light of modern knowledge, ridiculous.

Bacon's immediate need, therefore, reinforced by innate honesty and common sense, unfortunately took him directly to the Byzantines. He did not attempt more than he could do nor pretend to more than he knew.

If we compare Roger Bacon's *Greek Grammar* with a standard *Greek Grammar* of to-day, we find much that is familiar and much that is strange. The chief divergences are two: first, the inclusion of long digressions, in which Bacon impeaches his contemporaries and cites documentary evidence of their ignorance upon each and every topic (such digressions, it must be allowed, are possible in a modern work, but would be relegated to preface or appendix); second, the needlessly complex exposition of Greek accidence, as for instance the presentation of all theoretically possible forms of the verb-paradigm *τύπτω*, irrespective of whether they *existed* in the language or not. What clearer *reductio ad absurdum* could there be of the extreme disciplinary conception of grammar? Imagine learning think, thank, thunk, and think, thinked, thinked, as well as think, thought, thought, merely because the first two are possible formations!

Striking as these divergences from present-day usage are, the modern reader will find in the thirteenth century handbook much that is familiar both in substance and in arrangement. Only the relative proportion of its parts seems foreign. The work opens with chapters on the alphabet, on spelling and pronunciation, on

²Edited by E. Nolan and S. A. Hirsch (Cambridge University Press, 1902).

accent, syllabification, and so on—quite in the modern style, but far exceeding the corresponding chapters of the modern Grammars in extent. Even Bacon was medieval enough to put the abstract before the concrete, to confront his pupils with every rule and formula before he undertook to teach them the inflections and conjugations of the language itself.

In the course of these preliminary precepts, along with the many digressions, Bacon employs a device which reminds us at once of the "Κῦρος, ψιλὴν τὴν κεφαλὴν ἔχων", of blessed memory, at the opening of White's Beginner's Greek Book; namely, in order to acquaint the learner with the sound and the aspect of connected discourse in Greek, he inserts a reading lesson consisting of the Lord's Prayer, Ave Maria, Creed, and a few more familiar formulas in triple lines: first, the original Greek; second, the Greek words phonetically spelled by means of Latin characters; third, the Latin words in the Greek constructions! The last is, so far as I know, a unique pedagogical device. *Ex Patris* (ἐκ Πατρὸς) and *cum Patri* (σὺν Πατρί) are mongrel Greco-Latin phrases, but they leave no room for doubt as to the syntax of Greek prepositions!

The Grammar as we possess it is incomplete. It breaks off abruptly after the first verb paradigm, that of *τύπτω*. It is impossible to tell whether the remainder has perished or whether Bacon himself left the work unfinished.

Here and there in the dry pages of this technical treatise there are notable generalizations and discussions, which are the product of a fearless, indefatigable mind. It is these cases that particularly attract the modern reader. Bacon saw the *possibilities* of honest unpretentious scholarship and untrammelled scientific enquiry. In the field of grammar, in place of speculating upon 'the whichness of the what', he would have investigated by experiment the origin and nature of speech, the laws of phonetics and syntax. It was beyond his power to do so, but it was glorious to have dreamed of doing so, and to have brushed aside the quibbles of the Schoolmen.

We have seen that on the important strategic ground of grammar Bacon pointed the way toward new conquests. In an age of pretended learning, he demanded simple results and honest common sense methods. He candidly recorded his own ideas on the need of the study of Greek grammar and demonstrated the feasibility of acquiring it without fuss and flutter. His plan of campaign for the winning of Greek began to be carried out a hundred and fifty years later. If those who carried it out had had as broad a vision of its possibilities as Bacon possessed, they would have been more than mere humanists. Not till the generation of Erasmus did the full vision of Bacon begin to be realized.

HAVERFORD COLLEGE.

DEAN P. LOCKWOOD.

RESEARCH AND THE TEACHER OF THE CLASSICS¹

Research is so simple, so flexible, and so all-embracing that any one may welcome it and practise it. Research merely implies the desire to answer for one's self a question, and the initiative to pursue the investigation to its accomplishment. It is one of the most primitive of instincts, the characteristic, in fact, of a wideawake child. It is unworthy of us, and a slovenly habit, at best, to dismiss a query with a vague promise of some future investigation. As soon as a query arises whose answer is unknown to us, we should seek the answer and not rest content till we have it, affirmative or negative. I once opened an account book with myself, which I entitled *Cognoscere Volo*, in which I jotted down every interrogation that offered itself. Turning the blank book over, I labeled the other back *Incrementa Diurna* and entered there the answers to my investigations. It was a rather boyish whim, but it illustrates what I wish to impress—the necessity of immediately satisfying the impulse to investigate and the desirability of pursuing the quest to completion. Necessarily the teacher who owns such a habit will be kept constantly in a receptive, teachable mood—always searching for something new and interesting. And the conquest of the new is one of the happiest modes of recreation and relaxation. The tired teacher will always find rest in a bit of research, if not too strenuously pursued, for the very realization of new acquisition is a pleasure and a joy.

The last week of one University session, just before closing for the holidays, gave me several examples of what research may develop. With a class in Horace's Odes, I was elaborating upon the myth of Persephone's abduction, and chanced to be displaying Schobelt's beautiful painting of the cleft earth and Hades disappearing into the infernal regions, clasping in his arms the struggling maiden. It was called to my notice that one of the attendant spirits at the horses' bits was carrying a two-pronged fork. I could not recall having ever seen any classical allusion to the matter. It offered a subject for research which my class and I carried on conjointly for several days. The results of our investigation proved to be rather negative, as it happened, for there is no *locus classicus*, so far as we were able to discover, which speaks of a two-pronged fork being carried by Hades, corresponding to the trident wielded by Poseidon. Only Pindar refers to a baton or a scepter. It seems that the pitch-fork idea is developed wholly from works of art.

Another item may serve as an example. In an issue of *The Builder*, a periodical devoted to Masonic research, is a beautiful account of the origin of the American flag and its colors. The statement is made that Minerva and Ceres, who were recognized as patronesses of the plebeians, were represented in their temples as draped in flaming red; red therefore, said

¹This paper is a condensed version of an address delivered before The Oregon Teachers' Association.